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THE SEDENTARIZATION OF NOMADS IN THE WESTERN DESERT OF EGYPT

A. M. Abou-Zeid

178 Much attention has been paid in the last few years, in both Egyptian and
659 international circles, to the question of settling the nomads of the Western Desert of Egypt. A number of institutions (e.g. the Cairo Institute for Desert Research and the Departments of Sociology and Social Anthropology in the Egyptian universities) and some government departments (e.g. the Department of Desert Irrigation, of the Ministry of Public Works) have combined their efforts to study the economic and social situation of the semi-nomadic clans and the possibility of creating new sedentary agricultural communities to replace the present nomadic and semi-nomadic groups whose economy is based on the rearing of livestock in general, and of sheep in particular. It is the purpose of this paper to give a brief account of the main projects of sedentarization suggested by the authorities concerned in Egypt, and to outline their expected effects upon the economic system and modes of living, and also to indicate the repercussions they may eventually have on the whole social structure of the semi-nomadic clans. Apart from the planned projects, there is a marked and growing tendency among these people, especially the younger
178 generation, to abandon the traditional way of life and to settle down. This
166 tendency is generally stimulated by the changing social conditions. The tremendous hardships and the insecurity of the nomadic life, which is entirely dependent on rains, and the increasing social and cultural contacts with the urban communities in the Delta are the main factors influencing this change of social conditions, thus accentuating what may be described as a spontaneous and natural drift to settled life. Thus, an acute decline in the amount of rainfall, which is a frequent phenomenon in the Western Desert, and the consequent drought, famine and death of large numbers of animals will drive men to search for a more stable means of living in which they can find the security that is lacking in the nomadic way of life. The introduction of modern education and the establishment of schools in the larger villages have played a great role in changing the outlook of the people and in discrediting the traditional nomadic values. The advent of the railway and the improvement of other means of transport and communication have encouraged contacts with the Delta, and more particularly with Alexandria. As a result, an increasing number of young men migrate every year to Alexandria and get themselves paid jobs there. Trade and commercial transactions have also been increased with the Delta. New trade centres (e.g. El-Hammam, El-Dab'aa and Mersa Matrouh) have grown up along the railway line at the key stations. The most important of these centres is perhaps El-Hammam, which is the largest cattle market in the Western Desert. Small food stores and cafés and restaurants owned by 'native' people have been opened at these centres and in the larger

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villages and towns, especially at Mersa Matrouh which is the seat of the local government. The second world war was also influential in changing attitude and social values. Men who were employed as unskilled labourers during the war by the different combating armies became accustomed to paid jobs and to cash remuneration, which had previously been practically unknown to them. When the war ended, it was not easy for those workers to go back to the old nomadic life with all its hardships and insecurity. Some of them preferred to migrate to the Delta, while the others decided to settle down to work in the desert villages and towns as servants or as unskilled labour in the local government departments, schools, hospitals, etc. Most of the younger men now prefer to follow their example; the settled sedentary life is thus gaining ground all the time at the expense of livestock husbandry.

But important as they may be in accelerating the drift from nomadism to sedentary life, these factors fall beyond the scope of this paper and need not be discussed further in this context. We shall be concerned with the plans and schemes which are deliberately designed to deal with the settlement of the nomadic and semi-nomadic clans. But before going on to consider this problem we should like to give a brief outline of the area itself so as to establish a clear idea about the general setting, and to see the projects themselves against a background of the whole social life. This should help us to understand more clearly the motives underlying the projects and to discern the effects they may have on the social situation.

Geographers generally divide the Western Desert into three main divisions, each of which has its outstanding characteristics.

1. The northern strip which extends some 500 kilometres along the coast from the west of Alexandria to the Egyptian-Libyan border. This strip, known as the *Dera'a Bahari*, consists mainly of fertile cultivated land which extends some 20 to 30 kilometres to the south, tending generally to become narrower to the west till it almost vanishes at Sollum near the frontiers.
2. To the south of this green coastal zone lies a high plateau in which are a number of depressions, the most important being the Qattara Depression.
3. The rest of the area; i.e. the extreme southern region, is real arid desert.

The coastal zone is the only really inhabited and cultivated part of the desert; beyond it there is hardly any prospect for cultivation. It is also a vital centre to which the scattered clans and groups of herders come to gather round the water points and the artesian wells during the dry season when the water becomes scarce in the southern parts.

The climate of the desert varies between the Mediterranean climate to the north and along the coast, and the sub-tropical dry climate in the southern parts. The dry season is usually very warm, tending to grow hotter southwards; while the wet season, usually extending from November to March, is generally mild especially in the north. Rainfall is very erratic and varies greatly from year to year and from one place to another. But on the whole, there is more rain in the north than in the south, and in most years rain falls in the southern parts only on very rare occasions. Rain may come quite suddenly and cause torrential floods which sweep away dwellings, crops and animals alike. This is typical of the Sallum area.

According to the 1947 census, the Bedouins of the Western Desert number 68,161. Only 23,444, i.e. less than the half of the population, are engaged in

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105 livestock husbandry as their main occupation while the rest earn their living
162 by such other means as agriculture, fishing, stone-cutting, trade, etc. But whatever his main job may be, a man is likely to possess a number of sheep which he usually entrusts to a professional herdsman if he cannot look after them himself. This means that all sectors of the population have an active interest in livestock. Livestock, or rather sheep, are the most important and most esteemed item of wealth, and pastoral values still rank very high in spite of the obvious attraction of other types of work. On the other hand, pure nomadism is not practised, except perhaps by some small groups of camel-herders living in the far south of the area. The tremendous majority of the herdsmen are sheep-herders, whose movements are much more restricted than the movements of the real nomads. They have permanent settlements to which they retire when the grazing season is over, and there they practise agriculture, which they consider a secondary and supplementary occupation.

Most of the inhabitants of the Western Desert belong to the Awlad Ali clans who originally came from Libya. Some less important and less numerous clans, the Morabiteen clans, also live there as 'clients' of the more powerful Awlad Ali. A certain degree of correspondence exists between clan segmentation and the distribution of lands, both pasture-land and the fertile arable areas of the northern strip being distributed among clans and lineages in a clearly defined manner. A man cannot make use of the grazing ground, much less of the cultivation ground, known to belong to a different clan or lineage except under certain conditions and only obtaining the owners' permission. This does not mean, however, that clans and lineages are localized. For in spite of the natural tendency of kinsmen to cluster together and to live near to each other, the members of the same clan-segment may be widely dispersed, and the inhabitants of any specific locality, especially near the coast, usually belong to different clans. Nevertheless, a certain clan may be more strongly represented in a particular locality than all the other clans.

105 The problem of water supply is, naturally, the most crucial problem with
312 which the people have to cope. The absence of surface water, the shortness of the wet season, the low rainfall and the meagreness of the subterranean resources in most parts of the desert, especially inland, impose drastic limitations upon their activities. Apart from the few artesian wells found in the northern coastal zone, rain is the main source of water supply. It is, however, a very unreliable source because of its irregularity. Moreover, a considerable amount of rain-water is lost by seepage through the sand and by evaporation. The situation is further aggravated by the fact that not all the functioning wells yield potable water or even water suitable for the irrigation of fields. The water of a large number of these artesian wells is charged with a high percentage of dissolved salts. This water can only be used for domestic purposes. Certain experiments are now being carried out at Ras-el-Hikma and Fuka to see whether such saline water could be used for irrigating the pasture-lands.

105 The two main complementary occupations, i.e. livestock husbandry and
243 the cultivation of barley, are seriously affected by the water situation. The
311 strip of arable land which extends along the sea coast varies in breadth from place to place and from year to year according to the rainfall. In good years it may stretch some 10 to 20 kilometres southwards, but in bad years the cultivation becomes rather patchy and is confined to a very narrow strip only a few kilometres wide. The people are never sure of their crops, and in really

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bad years the returns may be so poor that grain and flour have to be sent from the Delta to avert famine. The failure of the crop may also compel whole clan-segments to migrate with their animals to the Delta. In this respect, the semi-nomadic clans of the Western Desert represent a real burden on the national economy of Egypt. 105 243 311

Livestock husbandry, which is by far the most important and highly valued occupation, is itself subject to the variability and the erratic nature of rainfall, since it is the rain which determines the abundance of herbage and, consequently, the number of animals reared. Pasture land is found mainly to the south of the cultivated land. Sometimes, the fallow patches among the barley fields are also covered with grass and other pasture plants suitable for grazing. Pasture plants usually persist between December and May; during the summer, the land becomes arid hard desert with only few dispersed patches of dry grass. The grazing season *par excellence* is from November to April, during which period barley stands in the fields. After the first showers of November, barley is sown and the young men soon move with their flocks to the pastures, leaving the older people to look after the fields. As the dry season advances, the flocks are moved northwards to the cultivated lands so as to be nearer to fodder and to water-holes. Thus, the movements of the herders are rhythmic and regulated by the division of the year into two major seasons: the wet season and the dry season. The wet season is the period of plenty during which the animals are well fed; the dry season is the period of starvation for the flocks which must then rely on such fodder as barley straw and on the drying grass. Any movements of animals that may take place during that season are carried out on a very limited scale. In exceptionally bad years the people are compelled to dispose of their animals, or at least of a large part of the flocks, or they may send them away to their friends and relatives who may be living near vegetation. Sometimes, the herdsmen find themselves compelled to cross the frontiers to Cyrenaica for pasture. 105 231

We can see then from this brief account to what extent the water situation is responsible for determining the modes of living in the desert and for channelling human activities and imposing certain limitations on these activities. Development projects and sedentarization schemes planned for the Western Desert and its inhabitants must, therefore, give a great deal of importance to the question of water and its availability. In fact, most of the contemplated projects envisage the possibility of better exploitation of the existing water supplies as well as the tapping of potential resources. 105

Rightly or wrongly, it is generally assumed in Egypt that nomadism and semi-nomadism represent a phase of deterioration which is no longer compatible with the actualities of modern life and therefore should be abolished. For, apart from the fact that it is responsible for the hardships and insecurity suffered by the desert dwellers and the consequent ill effects on the national economy, especially in bad years, nomadism as practised in the Western Desert and under the prevailing circumstances is wasteful and destructive. Vast stretches of land which could be reclaimed at little cost and cultivated intensively are simply left for grazing without any serious endeavour to make better use of them. Under the contemplated sedentarization projects it is intended to increase the cultivated area, to improve the pastures by introducing new pasture plants of higher nutritive value in areas where agriculture is not 178 312 657

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178 312 657 practicable, to tap unused resources, to develop the existing primitive crafts and to establish new industries. The question of water is the corner-stone of all these projects. Subterranean water has been tapped from the ancient Roman wells, and about 120 artesian wells have been sunk lately along the coast. A number of water cisterns have been constructed, and others are under construction, to preserve the rain-water for irrigation. Special attention has been paid in this regard to the western part of the coastal zone where the amount of rainfall exceeds that falling in the eastern parts. An example is the Wadi-el-Kharrouba cistern near Mersa Matrouh which will prevent large amounts of rain-water from being lost in the sands or in the sea, and store it for use during the dry season. All the water thus obtained will certainly help to extend the area sown with barley, especially in the El-Dab'aa zone; besides providing the more settled people with what they require to keep their fig trees and olive groves. The abundance of water may also encourage the introduction of new plants and trees which need a more stable and constant supply of water.

178 657 A few examples may serve to illustrate further the general policy adopted with regard to the problem of sedentarization of the Bedouin clans, and the steps taken to put the policy into effect.

The first example we shall consider is the Wadi-el-Natrun project which concerns the exploitation of the natural resources of the area so as to allow the establishement of new industries and the extension of the cultivated area, which in turn may eventually encourage the people to change to agriculture or industry, i.e. to a sedentary life. The *wadi* is an extended depression which lies some 22 metres below sea-level. The south-eastern end of the depression is 80 kilometres from Cairo, while the northern end is about 85 kilometres from Alexandria. A number of shallow salt lakes cover about half its total area, and some of these lakes become dry during the summer. The *wadi* is known as a rich source of salt and natron (sodium carbonate). Also a certain reed called *halfa* grows there and is used by the inhabitants of the area for the making of rough mats. The depression has always been regarded as a grazing ground for sheep and goats, so that only 25 *feddans*[1] were cultivated in 1952. According to the project, the extraction of salt and soda was put under government supervision. Subterranean water was tapped in a number of places and by the end of 1957 more than one thousand *feddans* were brought under the plough. Serious efforts were also made to introduce the cultivation of fruit, olives and dates as well as vegetables. Much attention was also given to the question of improving the production of animals by introducing different methods of breeding, and encouraging the inhabitants of the area to change over to the improved breeds which are superior to the local animals. This was met at first with much reluctance and resistance, but there are signs that the people are beginning to appreciate the benefit of owning the improved breeds. A factory for the manufacture of carpets and rugs has also been established by the government. A considerable proportion of the raw wool required for the industry is obtained from local sources, and the relatively small production finds a ready market in the larger cities of the Delta. The point of particular interest for us here is that all the unskilled labour employed in this industry as well as in the extraction of salt and sodium is recruited from the local population. Those workers have become accustomed to a settled life, so that when the season of extraction is over and work is temporarily suspended they do

1. A *feddan* = 1 038 acres.

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not take up herding animals but rather prefer to engage in agriculture, either as paid workers at the government research farm where fruit and vegetables are grown, or cultivating small patches of barley for their own consumption. Paid jobs in the factory or in the extraction industry and on the farm are very attractive to the young men. Fruit and vegetables are grown, for research purposes, in a large area of the reclaimed land. It is understood, however, that this land will be sold to the people to be exploited by them; and it is hoped that development of such farms will lead to the introduction of a canned food industry. Thus, the ultimate aim of the project is to encourage people to adopt a settled sedentary life by setting up new industries which depend mainly on the agricultural products of the area. The distribution of the arable lands will serve as an additional means of attaining this objective. All the lands of the desert are considered the exclusive property of the State, with only the right of usufruct conceded to the people. The people themselves know this only too well, although they may speak about 'their' fields and 'their' grazing-grounds and they are quite willing to settle down and to practise intensive agriculture if they are given the right to possess the land.

The main features of the Wadi-el-Natrun project repeat themselves in the Qattara Depression project which, besides its other objectives, is designed to bring about the sedentarization of the nomads by industrialization as well as by the enlarging of the cultivated area. The project is still under consideration; but from what is already known about it, it seems that the starting-point will be the digging of a long canal connecting the Mediterranean at the village of El-Alamein with the depression which lies 10 kilometres to the south of the coast. This step will be taken with the purpose of transforming a part of the depression into a large lake covering an area of about 14,000 square kilometres. The lowest point in the depression is 134 metres below sea-level; thus, it is expected that the sea water will rush towards the depression at some 600 cubic feet per second. The force of the rushing water could be used as motive power for factories in the area and as a means of generating the electric power necessary for industries to be established. As in the case of the Wadi-el-Natrun project, all the labour needed for these industries will be recruited locally. In addition, the creation of this vast artificial lake will temper the heat of the area and it is expected that as a result of the perpetual evaporation from the lake large amounts of rain will fall there, thus making possible the cultivation of vast stretches of land. It will certainly take a very long time for the lake to be completely filled up with sea-water. Experts estimate, for example, that it will need about 40 years for the water-level to reach 70 metres below sea-level, and about 150 years for it to reach 50 metres below sea-level. Some 1,300 years should pass before the depression itself is entirely filled up with salt deposits as a result of evaporation.

Lastly, the Ras-el-Hikma project endeavours to deal with the same problem but from a different angle. Unlike the Wadi-el-Natrun and the Qattara Depression projects which are concerned with industrialization and increasing the cultivated lands as means of encouraging sedentarization, the Ras-el-Hikma project is designed, to achieve that end by improving the grazing potentialities of the Western Desert in general and the Fuka-Ras-el-Hikma region in particular; and also by rationalizing the use of pasture-grounds. The logic that lies behind the project is as follows: The excessive misuse of the pasture plants and uncontrolled grazing in the desert have caused aridity and consequently obliged the people to adopt a nomadic life in search of

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178 pasture. Therefore, if pasture grasses could be developed and grazing practices
657 could be organized, it would then be easy to bring the herders to a form of sedentary life in which they could practise animal husbandry in certain specific areas all the year round, without any need for transhumance or for seasonal migrations or movements. It is thought that the long-term results of the project will be both an increase in livestock production and a greater interest in the land and in intensive agriculture—a feature which hardly exists among the nomads. Ras-el-Hikma, a small village on the coast mid-way between Alexandria and Sollum, has been chosen as a suitable place for a pilot project. A research station has been established there and the whole project has been placed under the sponsorship of the Desert Institute of Cairo.

An area of about 7500 *feddans* was selected and fenced round for the pilot project. Intensive research has been carried out to develop species of palatable pasture grass which can stand the drought and summer heat and other local conditions. Considerable areas have been resown and kept under close observation. Selected breeds of animals have been imported and placed under observation both for the study of grazing management and in order to determine to what extent these breeds can be used in improving the local breeds. Much attention has been given to the problem of developing the underground water supplies; a number of wells have been sunk and wind-pumps have been erected on some of them. Efforts have also been made to introduce the cultivation of fruits and vegetables and to encourage the local inhabitants to adopt them as part of their normal diet.

So much for the development of the natural resources and grazing management in the area. But if the Bedouins are to settle down and make best use of these improved conditions, they should also be provided with suitable housing for new type of existence. A section of the land put aside for the pilot project was divided into plots on each of which was built a 'model' house designed to meet all the requirements of the Bedouin in his new life. Each dwelling has its own small garden where vegetables and fruit can be grown for private consumption, and its own animal byre. Wells provided with wind-pumps have also been constructed to provide the settlers with water for daily use and for the irrigation of their gardens.

From the purely technical point of view, the pilot project has shown good and encouraging results; and there is every reason to believe that the main project will be equally successful if it is handled with the same determination and seriousness. But it may be too early to give any definite opinion about the sociological results that can be expected. The people have not yet shown any real interest in what is going on around them, in spite of the laborious and continuous efforts made by the staff of the research station to stimulate this interest.

From these examples, two main points may be singled out for special notice:

1. Most of the projects tend to encourage sedentarization at the expense of animal husbandry; or at least they do not give enough consideration to this vital question. The only exception to this is, perhaps the Ras-el-Hikma project. This policy may prove, in the end, to be harmful to livestock production and may have the effect of depleting the animal wealth of the region. Industrialization and the agricultural development of the arable areas in the desert, important as they may be as means of bringing about sedentarization, should not divert interest from long-range development schemes.

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2. It may prove impossible for all the claims put forward for the sedentarization projects to be be fulfilled unless the people are entitled to own the lands they cultivate. Besides giving the inhabitants a new feeling of security, this would attach them permanently to their fields, and thus incite them to give due attention to cultivation. Land-holding is considered to be the determining factor in the process of establishing sedentary life in the desert. 178 657

Reactions to the proposed sedentarization projects vary widely, from indifference, reluctance and resentment to the absolute acceptance of them together with the changes which they may be expected to bring about. The kind of reaction depends mainly on the benefits that may be gained, or the losses that may be suffered, as a result of the realization of these projects. Thus, the semi-nomads who usually spend a considerable part of the year near towns and the larger villages such as Mersa Matrouh and El-Dab'aa and who thus have some idea of the significance and the privileges of settled life react favourably in general and welcome the sedentarization projects. Similar reactions may be found among the groups who have been accustomed to wage labour and who have thus tasted the advantages which money can offer. On the other hand, the more nomadic clans, especially those inhabiting the southern and the western parts of the desert, are forthright in expressing their deep resentment and indignation concerning the new projects. This is more obvious among the nomadic groups which live near the Egyptian-Libyan borders and who thus have grazing interests in Cyrenaica as well. For them sedentarization means the loss of these interests. Tribal chiefs also express dismay at the projects and the impending changes. Their doubts and resentment spring from their fear of losing their authority over the tribesmen, if the clans and the nomadic groups are sedentarizated and thus brought under the control of the local administration. 178

There is no doubt that the realization of these projects will cut deep into the structure of the traditional Bedouin community. The creation of new industrial and trade centres, the drift to agriculture and industry and to paid jobs, the increase in contacts with the Delta and especially with Alexandria, the greater amounts of cash in the hands of the people as a result of all these developments, and lastly the emergence of individual or private ownership of land as a result of new land legislation will lead to a growing sense of individuality and of economic independence among the younger generation. These individualistic tendencies may have some disruptive effects on both the traditional patterns of social relationships and the total social structure. Being economically independent of the lineage or the larger kin-groups, the young men will be able to free themselves from the authority of their elders, which may lead in the end to the breaking down of the whole traditional structure.

Perhaps the system which will be affected more deeply by these new trends is the kinship system, around which revolves all social and political life in the desert. The core of this system is the co-operation of a large number of agnatic kin constituting one corporate economic unit in which the personality of the individual is entirely submerged by group interests. The economic independence of the individual members and the consequent trend towards separation will lead to the shrinkage of this kin-group and to the disappearance of lineages and larger lineage-segments. Thus, the corporate units based on kinship relations will be limited in size and most of them will take the form of the

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178 elementary family which prevails in the larger cities and the urban communities in general. In fact this type of family is already beginning to dominate the scene in the larger villages of the desert, such as Mersa Matrouh, which offer opportunities for trade and paid employment.

The traditional political system will also suffer badly, and it seems that the fears of the tribal chiefs are fully justified. Besides being affected by subjection to the local administrative authorities after sedentarization, the prestige of the chiefs will be equally depreciated by the antipathy of the people themselves to their intervention in their affairs. This antipathy can be noted among the more settled groups (in Mersa Matrouh, El-Dab'aa, El-Amriya, etc.) who tend to ignore the authority of the chiefs. Thus, it should be expected that the absolute coercive powers enjoyed by the chiefs of the more nomadic groups will be largely diminished by sedentarization and reduced to ineffectiveness. Yet the curb which will be imposed on the authority of the chiefs will provide, on the other hand, an effective means for social control in the desert. Under the present tribal organization, chiefs are liable to misuse their authority and can be a real source of unrest and trouble, by organizing raids against rival and hostile clans, smuggling goods across the Egyptian-Libyan frontiers, giving refuge and protection to criminals and helping them to cross the borders and escape punishment, etc. Sedentarization will put an end to these illegal activities.

In fact, the social achievements of the projects will be by no means less important than the economic results, although they were not envisaged at first by the authorities or, at least, were not given explicit consideration in the original plans. The importance of the sociological aspects of the projects can be judged from the fact that their effects will not be confined to the local Bedouin communities, but will rather influence Egyptian society at large. The emergence of the new mode of life depending mainly on intensive agriculture and on industry will encourage immigration from the Nile Valley. Some of the proposed projects do actually consider the possibility of moving 'active' and more trained peasantry elements from the Delta to rehabilitate the desert and more particularly the coastal zone and to cultivate the reclaimed lands. There is no doubt, also, that all the skilled labour needed for the new industries will be brought from Alexandria and other cities of the Nile Valley. Thus, the creation of new industrial and commercial centres in the desert will absorb a certain proportion of the inhabitants of the Delta. This can be regarded as a good contribution towards solving the problem of the increasing population of Egypt. But the crowning achievement of these projects will be the reduction of the cultural and social contrast which exists at present between the Western Desert, with its nomadic and semi-nomadic inhabitants, and the rest of the country. This contrast is manifested in the different patterns of social relationships, the different values and modes of thought, and the different structure prevailing in the desert and the Nile Valley. The creation of settled agricultural and industrial communities in the desert, the increase of contacts between the desert and the Delta, mass immigration into the desert and the breaking down of the traditional tribal organization will all help to bridge the existing social gulf. In other words, the realization of the sedentarization projects will lead in the end to a fuller social cohesion not only among the different Bedouin groups but also between the desert as a whole and the rest of the country.